## **Patent Claims**

U

20

a

5

- 1. Catalytically active human telomerase subunit, its functional equivalents, its variants and its catalytically active fragments.
- 2. Telomerase according to Claim 1, comprising the amino acid sequence depicted in Fig. 1b or its functional equivalents.

3. Nucleic acid sequences encoding sompounds according to Claims 1 and 2 and their functional equivalents.

- 4. Nucleic acid sequences according to Claim 3, comprising the DNA sequence depicted in Fig. 1a or its functional equivalents.
- 5. Antisense nucleic acids binding to the nucleic acid sequence according to Claim 3 or
- 6. Antibodies against telomerase according to Claims 1 and 2, where appropriate labelled with one or more labels.
- 7. Method of using Claims 3 and 4 for preparing telomerase.
- 8. Method of using 8. Use of antibodies according to Claim 6 for diagnosis.
- Method of using

  9. Use of antibodies according to Claim 6 for preparing medicaments.
  - 10. Vector comprising a nucleic acid sequence, in particular DNA, according to Claims-3.

    —and 4.
- Microorganisms harbouring the vector according to Claim 10.

12. Screening assay for identifying modulators of human telomerase comprising the telomerase according to Claims 1 and 2.

13. Process for preparing the telomerase according to Claims 1 and 2, characterized in that the microorganism according to Claim 11 is cultured and the telomerase is isolated.

add 63